

I CLAIM:

1) An extendable fill cap having a contained extension for use with mechanical equipment having a fluid fill hole comprising:

a) a base having a lower portion having an external diameter sized to snugly and securely mate within the fill hole on the mechanical equipment, said base also having a top opening having a thread therearound;

b) an upper head having a round longitudinal central opening therethrough, an upper portion thereof having an external peripheral surface adapted to be gripped and twisted, and a lower portion thereof having a thread configured to mate with the threaded top opening in the base; and,

c) a plurality of neck segments, each neck segment also having a round interior opening therethrough and having a tapered top portion adapted to mate within an opening immediately thereabove, and each having a smaller rounded tapered bottom portion; said neck segments including an upper most neck segment having a top peripheral portion sized to closely and centrally fit within the upper head, and including a lower most neck segment having a bottom portion sized to closely and centrally extend through the base, said neck segments assembled between the upper head and the base so that when the upper head is unscrewed from within the base, and then pulled, the upper head is solidly and peripherally continuously connected by the neck segments to the base;

wherein use when the base is snugly and securely mated within the fill hole, the upper head is unscrewed from the base and pulled, then fluid poured into the upper head will be conveyed to the fill hole.

2) An extendable fill cap as in claim 1 wherein the fill hole on the mechanical equipment is threaded and wherein the lower portion of the base has a mating threaded external thread.

3) An extendable fill cap as in claim 2 wherein threads on the top portion of the base are on an internal side portion of the top opening, and wherein the mating threads on the upper head are external threads on an external side of the lower portion.

4) An extendable fill cap as in claim 3 wherein a lower interior portion of the base has a drain hole and the interior portion of the base is sloped in order to drain fluid caught therein through the drain hole.

5) An extendable fill cap as in claim 3 wherein an upper portion of the base has a larger diameter than the lower of the base to accommodate and house neck segments which have a diameter exceeding the diameter of the lower portion of the base.

6) An extendable fill cap as in claim 5 further comprising an upper head cover so that when the upper head is screwed into the base the round opening extending through the inner

head and the neck segments stored within the base can be isolated from ambient air and contaminants therein.

7) An extendable fill cap as in claim 6 wherein the upper head cover further comprises an attached disc peripherally attached to and extending across the round opening in a top portion of the upper head, said attached disc having a semi-circular opening therethrough, and a second movable disc seated on and around the top portion of the inner head, said moveable disc also having a similarly sized semi-circular opening therethrough, said moveable disc configured with a stop so that when the upper head is twisted in a counter clockwise direction the semicircular openings are aligned, and when the top portion of the upper head is twisted in a clockwise direction the moveable disc rotates above the attached disc until the moveable disc covers the opening through the attached disc.

8) A method of filling a mechanical equipment with fluid through a fill hole comprising the following steps:

providing a fill cap having i) a base having a lower portion having an external diameter sized to snugly and securely mate within the fill hole on the mechanical equipment, said base also having a top opening having a thread therearound; ii) an upper head having a round longitudinal central opening therethrough, an upper portion thereof having an external peripheral surface adapted to be gripped and twisted, and a lower portion thereof having a thread configured to mate with the threaded top opening in the base; and, iii) a plurality of neck segments, each neck segment also having a round interior opening therethrough and

having a tapered top portion adapted to mate within an opening immediately thereabove, and each having a smaller rounded tapered bottom portion; said neck segments including an upper most neck segment having a top peripheral portion sized to closely and centrally fit within the inner head, and including a lower most neck segment having a bottom portion sized to closely and centrally extend through the base, said neck segments assembled between the inner head and the base so that when the inner head is unscrewed from within the base, and then pulled, the inner head is solidly and peripherally continuously connected by the neck segments to the base;

inserting the base snugly and securely mated within the fill hole;

unscrewing the upper head from the base;

pulling the upper head to continuously assemble the neck segment; and,

pouring fluid into the upper head to thereby be conveyed to the fill hole.

9) A method as in claim 8 wherein the fill hole on the mechanical equipment is threaded and wherein the lower portion of the base has a matingly threaded external diameter; and wherein the step of inserting the base within the fill hole comprises the step of screwing the base into the fill hole.

10) A method as in claim 9 wherein threads on the top portion of the base are on an internal side portion of the top opening, and wherein the mating threads on the upper head are external threads on an external side of the lower portion.

11) A method as in claim 10 wherein a lower interior portion of the base has a drain hole and the interior portion of the base is sloped to drain fluid caught therein through the drain hole.

12) A method as in claim 11 wherein an upper portion of the base has a larger diameter than the lower of the base to accommodate and house neck segments which have a diameter exceeding the diameter of the lower portion of the base.

13) A method as in claim 12 wherein the fill cap further comprises an inner head cover so that when the inner head is screwed into the base the round opening extending through the inner head and the neck segments stored within the base can be isolated from ambient air and contaminants therein; and further comprising the step of removing the cover prior to pouring fluid into the upper head.

14) A method as in claim 14 wherein the inner head cover further comprises an attached disc peripherally attached to and extending across the round opening in a top portion of the upper head, said attached disc having a semi-circular opening therethrough, and a second movable disc seated on and around the top portion of the inner head, said moveable disc also having a similarly sized semi-circular opening therethrough, said moveable disc configured with a stop so that when the upper head is twisted in a counter clockwise direction the semicircular openings are aligned, and when the top portion of the upper head

is twisted in a clockwise direction the moveable disc rotates above the attached disc until the moveable disc covers the opening through the attached disc; and further comprising the step of removing the cover prior to pouring fluid into the upper head by twisting the upper portion of the upper head in a counter clockwise direction to align the openings in the discs.